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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

DAMIANO, ANNE L

ART UNIT

PAPER NUMBER

2114

DATE MAILED: 05/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/912,806	GERNHARDT, BIRGER	
	Examiner	Art Unit	
	Anne L Damiano	2114	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 July 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>3</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to because Figure 2 does not show "output 53" of the microcode register as referenced to on lines 20 and 23 of page 8. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Objections

2. The claims are objected to because claims 6 and 7 are crowded too closely together, making reading and entry of amendments difficult. Substitute claims with lines one and one-half or double spaced on good quality paper are required. See 37 CFR 1.52(b).

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claim 3 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the

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specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 3 recites the limitation "the data range" in line 1. There is insufficient antecedent basis for this limitation in the claim.

6. Claims 4 and 13 are generally narrative and indefinite, failing to conform with current U.S. practice. The examiner cannot understand what is being claimed in claim 4. "Preceding point in time that are decisive for the addresses" is unclear and not made comprehensible by the specification. Claim 4's dependent claims 5-9 are also rejected under 35 U.S.C. 112, second paragraph.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Dorsey et al. (6,198,751).

A device for analyzing digital data formulated in accordance with a communication protocol, comprising:

a) a data memory (input memory) for storing the digital data to be analyzed (column 4: lines 45-49); (Data that is translated is analyzed in the translation process.)

b) a microcode memory (microcoded control unit) for storing a microcode that represents at least part of the communication protocol (column 2: lines 42-45, column 8: lines 2-5);

c) a data register for reading out a pre-determined number of bits from the data memory (column 8: lines 2-12); (When the packet in the data memory is translated, it's content will be loaded to a register in the translator control unit.)

d) a microcode register for reading out a pre-determined number of bits from the microcode memory, with the content of the microcode register being usable for analyzing the content of the data register (column 2: lines 43-45 and column 8: lines 11-19);

e) an output memory into which the results of the analysis are entered (column 2: lines 19-26);

f) a first addressing unit for addressing the data memory (column 7: lines 22-24 and figure 5: component 53b); and

g) a second addressing unit for addressing the microcode memory, with the first and second addressing units being designed to take into account the content of the data register

and/or the microcode register when the corresponding addresses are determined (column 4: lines 64-66, column 8: lines 5-19 and figure 5: component 51b) (The microcode that is chosen is in accordance with the type of communication protocol of the packet of the data memory. The type of communication protocol can be determined by the destination and source address of the packet. Therefore, the addressing units take into account the content of the register when the corresponding addresses are determined.)

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dorsey as applied to claim 1 above.

Regarding claim 2, Dorsey discloses the device for analyzing digital data with first and second addressing unit above. However, Dorsey does not specifically disclose each addressing unit comprising a counter that may be changed with the addresses in accordance with the content of the data register and/or microcode register are determined.

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It would have been obvious to a person skilled in the art at the time the invention was made to include a counter in the addressing units in the system taught by Dorsey. It would have been obvious because a person skilled in the art would understand, that although not specifically disclosed, Dorsey's addressing units have address counters that change in accordance with the content of the data registers and are used when reading from the registers.

7. Claims 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dorsey.

Regarding claim 10, Dorsey discloses a method of analyzing digital data formulated in accordance with a communication protocol comprising the steps of:

a) loading the digital data to be analyzed into a data memory (input memory) (column 4: lines 45-49); (Data that is translated is analyzed in the translation process.)

b) loading a microcode into a microcode memory (microcoded control unit), with the microcode representing at least part of the communication protocol (column 2: lines 42-45, column 8: lines 2-5);

c) reading out a pre-determined number of bits from the data memory into a data register in accordance with an address specified by a first addressing unit (column 8: lines 2-18,); (When the packet in the data memory is translated, it's content will be loaded to a register in the translator control unit.)

d) reading out a pre-determined number of bits from the microcode memory into a microcode register in accordance with an address specified by a second addressing unit (column 2: lines 43-45 and column 8: lines 11-19);

e) Assigning functions to the data bits in the data register according to the bits in the microcode register (column 2: lines 19-26); (Translating from one protocol to another involves assignment of objects or functions to the data bits in the data register. The microcode register holds the different sets of microcode for the different communications protocols and so the assigning happens in accordance with the bits in the microcode register.)

f) entering at least one result of the assignment in an output memory (column 2: lines 19-26).

Dorsey discloses the address control unit causing a jump in the address being read from the data memory (column 10: lines 58-65). However, Dorsey does not specifically disclose updating counter reading for the first and second addressing units in accordance with the contents of the data register and/or the microcode register.

It would have been obvious to a person skilled in the art at the time the invention was made to include a counter in the addressing units in the system taught by Dorsey. It would have been obvious because a person skilled in the art would understand, that although not specifically disclosed, Dorsey's addressing units have address counters that change in accordance with the content of the data registers and are used when reading from the registers.

Regarding claim 11, Dorsey discloses the method according to claim 10 wherein the entry in accordance with step f) takes place at an address specified by a third addressing unit (figure 5: component 58 and adjacent address control and column 8: lines 27-31).

However, Dorsey does not specifically disclose a counter reading for the third addressing unit being updated in accordance with the content of the data register and/or the microcode register.

It would have been obvious to a person skilled in the art at the time the invention was made to include a counter in the addressing units in the system taught by Dorsey. It would have been obvious because a person skilled in the art would understand, that although not specifically disclosed, Dorsey's addressing units have address counters that change in accordance with the content of the data registers and are used when reading from the registers.

Regarding claim 12, Dorsey discloses the method according to claim 11 as possibly further including error detection or correction means (column 7: lines 38-42). However, Dorsey does not specifically disclose prior to entry in accordance with step f) an incomplete entry is read out from the output memory by a logic circuit and changed to take into account a new result, and then rewritten into the output memory.

It would have been obvious to a person skilled in the art at the time the invention was made to change an incomplete entry to a new result prior to entering it to the output memory in the system taught by Dorsey. It would have been obvious because Dorsey discloses error detection and correction. A person skilled in the art would have understood error correction as being replacing a faulty entry with a correct entry.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


See PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anne L Damiano whose telephone number is (703) 305-8010. The examiner can normally be reached on M-F 9-6:30 first Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel can be reached on (703) 305-9713. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ALD


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PRIMARY EXAMINER